

Title (en)  
ORTHOGONAL TRAINING FIELD SEQUENCES

Title (de)  
ORTHOGONALE TRAININGSFELDSEQUENZEN

Title (fr)  
SÉQUENCES DE CHAMPS D'APPRENTISSAGE ORTHOGONALES

Publication  
**EP 3308514 A1 20180418 (EN)**

Application  
**EP 16742047 A 20160615**

Priority

- US 201562180030 P 20150615
- US 201562188331 P 20150702
- US 201562190245 P 20150708
- US 201615182554 A 20160614
- US 2016037578 W 20160615

Abstract (en)  
[origin: US201636659A1] Aspects of the present disclosure provide techniques for phase tracking in wireless communications using frames with some portions that use relatively long symbol durations.

IPC 8 full level  
**H04L 27/26** (2006.01)

CPC (source: CN EP KR US)  
**H04B 7/0452** (2013.01 - CN KR US); **H04B 7/0456** (2013.01 - CN KR US); **H04L 5/0023** (2013.01 - CN KR US);  
**H04L 5/0048** (2013.01 - CN KR US); **H04L 25/0204** (2013.01 - KR US); **H04L 25/0224** (2013.01 - KR); **H04L 27/2602** (2013.01 - CN EP US);  
**H04L 27/26025** (2021.01 - CN EP KR US); **H04L 27/26035** (2021.01 - KR); **H04L 27/2613** (2013.01 - CN EP KR US);  
**H04W 56/0035** (2013.01 - CN EP US); **H04W 72/04** (2013.01 - CN US); **H04L 27/26035** (2021.01 - CN EP US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 10237839 B2 20190319; US 201636659 A1 20161215**; BR 112017026910 A2 20180814; CA 2983876 A1 20161222;  
CA 2983879 A1 20161222; CN 107743690 A 20180227; CN 107750447 A 20180302; EP 3308513 A1 20180418; EP 3308513 B1 20200429;  
EP 3308514 A1 20180418; EP 3691213 A1 20200805; EP 3691213 B1 20220518; ES 2808858 T3 20210302; JP 2018524879 A 20180830;  
JP 2018524881 A 20180830; KR 102011914 B1 20190819; KR 20180018556 A 20180221; KR 20180018557 A 20180221;  
US 10285149 B2 20190507; US 10820291 B2 20201027; US 2016365955 A1 20161215; US 2019200314 A1 20190627;  
WO 2016205327 A1 20161222; WO 2016205333 A1 20161222

DOCDB simple family (application)  
**US 201615182551 A 20160614**; BR 112017026910 A 20160615; CA 2983876 A 20160615; CA 2983879 A 20160615;  
CN 201680034507 A 20160615; CN 201680034528 A 20160615; EP 16732853 A 20160615; EP 16742047 A 20160615;  
EP 20165987 A 20160615; ES 16732853 T 20160615; JP 2017564446 A 20160615; JP 2017564616 A 20160615; KR 20177035840 A 20160615;  
KR 20177035843 A 20160615; US 2016037569 W 20160615; US 2016037578 W 20160615; US 201615182554 A 20160614;  
US 201916291411 A 20190304